

IN THE SPECIFICATION

Please replace Table 2 with the following replacement Table:

Table 2. Gene/polypeptide segments with amino acid sequences.

SEQ ID NO. (amino acid)	SEQ ID NO. (nucleotide)	AviIII Segment	Segment Data
1	2	Total length	SEQ ID NO: 1 (see Table 3 <u>[1]</u>); SEQ ID NO: 2 (see Table 4 <u>[2]</u>)
<u>8</u>		Signal (potential)	<u>MRSRRLVSLLAATA</u> <u>SFAVAAALGVLP</u> <u>IAITASPAHA</u>
3		CD (GH74)	<u>A</u> TTQPYTWSNVAIAGGGGFVDGIVFNEGAPGILYVRTDIGGMYRWDAANGRWIPLLD WVGWNNWGYNGVVSIADPINTNKVWAAVGMYTNSWDPNNDGAILRSSDQGATW QITPLPFKLGGMNPMGRGMGERLAVDPNNDNILYFGAPSGKGLWRSTDGATWSQMT NFPDVGTYIANPTDITGYQSDIQGVVWVAFDKSSSSLGQASKTFVGVADPNNPVFW SRDGGATWQAVPGAPTGFIPHKGVFDPNVHVLYIATSNITGGPYDGGSSGDVWKFSVT SGTWTRISVPSTDTANDYFGYSGLTIDRQHPNTIMVATQISWWPDTIIFRSTDGGAT WTRWDWTSYPNRSRLRYVLDISAEPLWTFGVQPNPPVPSPKLGWMDEAMADPFNS DRMLYGTGATLYATNDLTKWDSGGQIHIAPMVKGLEETA VNDLISPPSGAPLISALG DLGGFTHADVTA VPSTIFTSPVFTTGTSDY AELNPSIIVRAGSFDPSQPNDRHVAFS TDGCKNWFQSGSEPGVTTGGTVAASADGSRFVWAPGDPGQPVVYAVGFGNSWAA SQGV PANAQIRSDRVNPKTFYALSNGT FYRSTGGVTFQPVAA GLPSSGAVGVVMFH AVPGKEGDLWLAASSGLYHSTNGGSSWSAITGVSSA VNVGFGKSAPGSSYPAVFVV GTIGGVTGAYRSDDCGTTWVLINDDQHQQYGNWGWQAITGDHANLRRVYIGTNGRGIV YGDIGGAPSG
4		CBD_III (partial)	<u>V</u> SGGVKVQYKNNDSAPGDNQIKPGLQVVNTGSSSVDLSTVTVRYWFTRDGGSSTLV YNCDWAAIGCGNIRASFGSVNPATPTADTYLQ*
5		CBD_III (partial)	<u>V</u> SGGVKVQYKNNDSAPGDNQIKPGLQVVNTGSSSVDLSTVTVRYWFTRDGGSSTLV YNCDWAAIGCGNIRASFGSVNPATPTADTYLQ

Please replace Table 5 with the following replacement Table:

Table 5. Multiple amino acid sequence alignment of a AviIII catalytic domain and polypeptides with Glycoside Hydrolase Family 74 catalytic domains.

Multialignment of related Glycoside Hydrolase Family 74 catalytic domain

GH74 Ace: *Acidothermus cellulolyticus* AviIII catalytic domain GH74 SEQ ID NO: 3

AviIII Aac: *Aspergillus aculeatus* Avicelase III (endoglucanase). GeneBank Acc. # BAA29031 SEQ ID NO: 7

GH74_Ace AT**T**PQY**T**SNSVAINAIGGGG-FVDGI**V**FNEGA**P**GILYVRTIDIGMYRWDAANGRWPILLDWVG
AviiIII_Aac AA**S**OAYT**K**WNVVTGGGGGF**T**PGIVFNPSAKGVAYARTDIGGAYRLN**S**D-TWTPLMDWVG
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GN74_Ace WNNWGYNGVVSIAADPINTNKVWAAVGMYTNSWDPNQGAILRSSDQGGATWQITPLPFKLG
AviIII_Aac NDTWHDWGIDALATDPVDTRVYVAVGMYTNEWDPNVGSILRSTQGGTWETKLPFKVG

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GH74_Ace GNNPGRGMGERLAVDPNNNDNILYFGAPSGKGLWRSTDGATWSQMTNFPDVGTYYIANPTD
 AviIII_Aac GNNPGRGMGERLAVDPNKNSILYFGARSGHGLWKSTDYGATWSNVTSFTWTGTYYFQDSSS

GH74_Ace TTTGYSQSDIQGVVWVAFDKSSSLGQASKTIFVGVDADPNNPVFWSRDGGATWQAVPGAP-T
AviIII_Aac T--YTSPDVGIAWVTFDSTSGSSGSATPRIFVGVDADAGKSVPFKSEDAQTAWWVSSEPQY

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GH74_Ace GFIPHKGVFDPVNVHLYIATSNITGGPYDGSSGDVVKFSVTSGTWTRISVPVSTDTANDYF
AviIII_Aac GFLPHKGVLSPPEEKTLYISYANGAGPYDGTNGTVHKYNIITSGVWTDISP---TSLASTYY
:.....:.....*:.....*:.....*:.....*:.....*

GH74_Ace
AviIII_Aac

GYSGLTIDRQHPNTIMVATQISWWPDTIIFRSTDGGATWTRIWDWTSYPNRSRLRYVLDIS
GYGGLSVDLQPGLTMLVAALNCWWPELIFRSTDGSGATWSPIEWNGYPSINYYSYSDIS
* * * * *

GH74_Ace AEPWLTFCGVQNPFPVPSPKLGWMDMAIDPFNSDRMLYGTGATLYATNDLTKWDSGGQI
AviIII_Aac NAPWIQDTTSTDQFP--VRVGWVMEALADPFDSNHWLYYGTGLTYVGGHDLTNWDSKHNV

GH74_Ace HIAPMVKGLEETAVNDLISPPSGAPLISALGDLGGFTHADVTAVPSTIFTSPVFTTGTSTV
AviIII_Aac TVKSLAVGIEEMAVLGLITPPGGPALLSAVGDDGGFYHSDLDAAPNQAYHTPT*YGT*TTNGI

GH74_Ace
AviIII_Aac

DYAEINPSIIIVRAGSFDPSQQPNDRHVAFSTDGGKNWFQGGSEPGGVTTGGTVAASADGSR
DYAGNKPSNIVRSGASDDYP-----TLALSSNFGSTWYADYAASTSTGTGTGAVALSADGDT
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GH74_Ace FVWAPGDPGQPVVYAVGFGNSWAASQGVPAQAIRSDRVNPKTFYALSNGTFYRSTDGGV
AviIII_Aac VLLMSSTSGALVSKSQG---TLTAVSSLPSGAVIASDKSDNTVFYGGSGAGIYVSKNTAT

[illegible]

GH74_Ace
AviIII_Aac

GFGKSAPGSSYPAVFVVGTTGGVTGAYRSDDCGTTWVLINDDQHQYGN-WGQAITGDHAN
GFGKASSTGSYVVIYGFFTIDGAAGLFKSEDAAGTNQVVISDASHGFGSGSANVVGNDLQT

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GH74_Ace      LRRVYIGTNGRGIVYGDIGGAPSG
AviIII_Aac    YGRVFRGHERPGHLLRQSQREPAG
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